## **ABSTRACT**

The invention relates to a steam generator in which the continuous heating panel of an evaporator is arranged in a heating gas channel which can be cross-flown in a more or less horizontal direction of a heating gas. Said continuous heating panel of the evaporator comprises a plurality of pipes of a steam generator which are connected in parallel to each other. Said pipes are constructed in such a way that they cross a flow medium and are provided with the part of a more or less vertical down pipe which can be cross-flown by the flow medium in a downward direction and with the part of a rising pipe connected downstream with respect to the down pipe on the side of the flow medium and which is more or less vertical and can be cross-flown by the flow medium in an upward direction. The continuous heating panel of the evaporator is arranged in such a way that one pipe of the steam generator which is hotter than the other pipe of the steam generator of the same continuous heating panel of the evaporator has a flow medium rate which is higher than that of the other pipe of the steam generator. The aim of said invention is to operate said steam generator in a relatively simple manner in association with a highly stable flow in the continuous heating panel of the evaporator. For this purpose, the flow medium of the continuous heating panel of the evaporator is supplied in such a way that the flow velocity thereof is higher than a minimum flow velocity predefined in the down pipe. The inventive steam generator is extremely well adapted for carrying out said method and comprises another continuous heating panel of the evaporator which is connected downstream with respect to the continuous heating panel of the evaporator on the side of the flow medium.